Docket No.: 2001.662USD2

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

- 1-27 (Cancelled)
- 28. (Currently Amended) A process for solution synthesis of a peptide in an organic solvent or a mixture of organic solvents, the process comprising repetitive cycles of steps (a)-(c):

wherein step(a) comprises a coupling step, using an excess of a molecule comprising an activated carboxylic component to acylate an amino component,

wherein step (b) comprises a quenching step in which a scavenger is used to remove residual activated carboxylic functions, wherein the scavenger may also be used for deprotection of the growing peptide;

wherein step (c) comprises one or more aqueous extractions,

and wherein the process comprises at least one step (b), referred to as step (b'), in which an amine comprising a free anion or a latent anion is used as a scavenger of residual activated carboxylic functions, and wherein the anion is selected from the group consisting of carboxylate, sulfonate, sulfate, phosphonate, phosphate and phenolate.

29. (Previously Presented) The process of claim 28, wherein in step (a) the molecule comprising an activated carboxylic component is formed by reacting a carboxylic component, a coupling additive and a coupling reagent and wherein the molar amounts of the reagents used are in decreasing order:

carboxylic component, coupling additive > coupling reagent > amino component.

30. (Previously Presented) The process of claim 28, wherein in step (a) a preactivated carboxylic component is used.

Application No. 10/693,802 Docket No.: 2001.662USD2
Amendment dated December 4, 2007

Reply to Final Office Action of October 16, 2007

31. (Previously Presented) The process of claim 28, wherein in step (b') an amine

comprising a latent anion is used as the scavenger.

32. (Previously Presented) The process of claim 31, wherein the latent anion in the

scavenging amine bears a temporary protecting group which can be selectively removed in the

presence of any permanent protecting groups attached to the growing peptide.

33. (Previously Presented) The process of claim 31, wherein the latent anion in the

scavenging amine bears a temporary protecting group which displays a lability similar to that of

the temporary protecting group present at the N-terminus of the growing peptide.

34. (Previously Presented) The process of claim 32, wherein the temporary

protecting groups are hydrogenolytically removable groups.

35. (Previously Presented) The process of claim 34, wherein the temporary

protecting groups are of the benzyl type.

36. (Previously Presented) The process of claim 31, wherein the scavenger is a

primary amine comprising a free anion or a latent anion.

37. (Previously Presented) The process of claim 36, wherein the primary amine is a

C-terminally protected amino acid derivative.

38. (Previously Presented) The process of claim 37, wherein the amino acid is  $\beta$ -

alanine or a derivative thereof.

39. (Previously Presented) The process of claim 38, wherein the scavenger is benzyl

 $\beta$ - alaninate or a salt thereof.

40. (Withdrawn) The process of claim 28, comprising one or more cycles wherein in

step (b) a polyamine is used as the scavenger.

- 3 -

Application No. 10/693,802 Docket No.: 2001.662USD2
Amendment dated December 4, 2007

Reply to Final Office Action of October 16, 2007

41. (Previously Presented) The process of claim 28, comprising one or more cycles

wherein in step (b) both quenching and deprotection occur and the subsequent step (c) comprises

sequential basic and neutral extractions.

42. (Previously Presented) The process of claim 41, wherein the extractions are

performed in the presence of sodium chloride or potassium nitrate.

43. (Withdrawn) The process of claim 28, wherein in the last cycle in step (a) the

protecting groups of the carboxylic component display a similar lability to that of the permanent

protection groups of the growing peptide and in step (b) the scavenger is a polyamine.

44. (Previously Presented) The process of claim 28, wherein the organic solvent or

mixture of organic solvents is ethyl acetate or a mixture of ethyl acetate and dichloromethane, a

mixture of ethyl acetate and 1-methyl-2-pyrrolidinone, a mixture of ethyl acetate and N,N-

dimethylformamide or a mixture of ethyl acetate and tetrahydrofuran.

45. (Previously Presented) The process of claim 28, wherein the process is performed

within a temperature range of 0 to 50°C.

46. (Previously Presented) The process of claim 45, wherein the process is performed

at ambient temperature.

47. (Cancelled)

48. (Previously Presented) The process of claim 28, the process applied in a method

for automated solution synthesis of peptides.

49. (Previously Presented) The process of claim 32, wherein the permanent protecting

groups are acidolytically removable groups.

50. (Withdrawn) The process of claim 28, wherein a thiol comprising a free or a

latent anion is used as a scavenger instead of an amine comprising a free or a latent anion.

- 4 -

Application No. 10/693,802 Docket No.: 2001.662USD2
Amendment dated December 4, 2007

Reply to Final Office Action of October 16, 2007

51. (Withdrawn) The process of claim 28, comprising one or more cycles wherein in

step (b) deprotection does not occur and the subsequent step (c) comprises sequential basic,

acidic and basic extractions.

52. (Withdrawn) The process of claim 51, wherein the extractions are performed in

the presence of sodium chloride or potassium nitrate.

53. (Withdrawn) The process of claim 51, comprising a subsequent step (d) which

comprises deprotection and sequential basic and neutral extractions.

54. (Withdrawn) The process of claim 53, wherein the extractions are performed in

the presence of sodium chloride or potassium nitrate.

55. (Previously Presented) The process of claim 28, wherein the process further

comprises at least one step (d), wherein step (d) comprises a separate deprotection step, followed

by one or more aqueous extractions.

56. (Cancelled)

57. (Currently Amended) The process of claim <del>56</del> 28, wherein the anion is

carboxylate.

58. (Currently Amended) The process of claim 56 28, wherein the anion is sulfonate.

59. (Currently Amended) The process of claim 56 28, wherein the anion is sulfate.

60. (Currently Amended) The process of claim 56 28, wherein the anion is

phosphonate.

61. (Currently Amended) The process of claim 56 28, wherein the anion is phosphate.

62. (Currently Amended) The process of claim 56 28, wherein the anion is phenolate.

63. (Previously Presented) The process of claim 28, wherein the anion is formed

under basic aqueous conditions.

- 5 -